

# Missouri Behavioral Risk Factor Surveillance System

## 2017 Key Findings



Missouri Department of Health and Senior Services  
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# ACKNOWLEDGEMENTS

## Missouri Behavioral Risk Factor Surveillance System (BRFSS) 2017 Key Findings

### Special Thanks

Thank you to the more than 7,600 Missouri adults whose telephone numbers were randomly selected for participation in the 2017 BRFSS interviews. This valuable information would not be available without your willingness to participate.

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The U.S. Centers for Disease Control and Prevention (CDC), Division of Behavioral Surveillance provides support to state BRFSS programs through funding, primary data analysis and technical assistance.

Suggested Citation: Li JQ, Long K and Miller EL. 2017 Missouri Behavioral Risk Factor Surveillance System Key Findings. Jefferson City, MO: Missouri Department of Health and Senior Services, Office of Epidemiology, December 2018.

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# INTRODUCTION

The Missouri Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults age 18 and older that collects a range of information on health issues. BRFSS data are used to identify emerging health problems, establish health objectives and track their progress, and develop and evaluate public health policies and programs.

A total of 7,601 adults were interviewed January through December 2017 by the Health and Behavioral Risk Research Center at the University of Missouri-Columbia. Randomly selected household landline telephone numbers were called and an adult was randomly selected to participate in the survey. Additionally, randomly selected adult cell phone users participated in the interview. Data from the landline and cell phone interviews were aggregated and weighted by the U.S. Centers for Disease Control and Prevention (CDC) to be representative of non-institutionalized adults in Missouri. This report summarizes key findings from the survey.

**Please note:** The CDC began using new weighting methodology in 2011 that allows the data to be more representative of the adult population. A description of the new methodology may be found at <https://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html>. Data from 2011 and later should not be compared to data prior to 2011 because of the new weighting method.

The 2017 BRFSS revealed improvements among Missouri adults in the following areas:

- 91.0 percent of adults ages 55-64 had health care coverage, a slight increase from 89.6 percent in 2013, and the coverage among adults ages 18-24 also slightly increased from 77.5 percent in 2013 to 80.2 percent in 2017
- 84.2 percent of adults ages 18-64 had health care coverage, a significant increase from 81.2 percent in 2013
- 12.6 percent of adults had no health care coverage, significantly decreasing from 15.1 percent in 2013, and 25.6 percent of adults with annual household incomes of less than \$15,000 also had no health care coverage, declining from 2013 (33.7 percent)
- 79.9 percent of adults supported local laws that make all indoor workplaces smoke-free, a significant increase from 74.6 percent in 2013
- 72.5 percent supported a change in Missouri law that would make all indoor workplaces smoke-free statewide, a significant increase from 65.7 percent in 2013
- 20.8 percent were currently smoking cigarettes, a slight decline from 22.1 percent in 2013

However, the following health concerns were found among Missouri adults:

- 44.4 percent of adults with annual household incomes of less than \$15,000 were current smokers
- 35.4 percent were overweight, and 32.5 percent were obese
- 29.2 percent had not engaged in leisure time physical activity during the past 30 days
- 27.8 percent had been diagnosed with arthritis by a doctor
- 24.5 percent of Missouri adults had ever used an electronic cigarette
- 23.9 percent of males engaged in binge drinking of alcohol (5 or more drinks on one occasion), while 14.0 percent of females engaged in binge drinking of alcohol (4 or more drinks)
- 13.8 percent did not see a doctor when needed in the past 12 months due to cost
- 12.9 percent of the adults recommended for screening had a CT or CAT scan for lung cancer in the last 12 months
- 9.4 percent of adults had been told by a health professional they had pre-diabetes

In general, a consistent finding from the survey is that adults who have the lowest education levels and annual household incomes compared to those with the highest education and income levels were less healthy, engaged in health risk behaviors to a greater extent, and were less likely to have health care coverage.

# 2017 BRFSS KEY FINDINGS

## **General Health Measures**

Most Missouri adults (81.0 percent) had excellent, very good or good general health while 19.0 percent had fair or poor health. Almost half (48.8) of adults with an annual household income of less than \$15,000 had fair or poor general health. More than one-quarter of adults (25.7 percent) experienced poor physical health on three or more of the past 30 days. Almost twenty-eight (27.7) percent had mental health that was not good on three or more of the past 30 days. More than thirty-four (34.3) percent were kept from doing their usual activities on three or more of the past 30 days due to poor physical or mental health.

## **Health Care Access**

In Missouri, the overall percentage of adults without health care coverage declined significantly from 15.1 percent in 2013 to 12.6 percent in 2017, but the decrease was not statistically significant in the age groups of 18-24 years (22.5 percent to 19.8 percent), 25-34 years (26.5 percent to 22.5 percent), 35-44 years (20.0 percent to 15.1 percent), 45-54 years (15.7 percent to 12.8 percent), and 55-64 (10.2 percent to 9.0 percent) from 2013 to 2017 respectively. A significantly greater percentage of African-American adults (24.2 percent) did not have health care coverage compared to white adults (10.7 percent). A significantly greater percentage of adults with annual household incomes less than \$15,000 (25.6 percent), between \$15,000 and 24,999 (21.2 percent) or between \$25,000 and 34,999 (19.6 percent) had no health care coverage compared to those with incomes of \$35,000-49,999 (10.1 percent), or \$50,000 and greater (5.3 percent). The percentage of no health-care coverage decreased significantly in the households with lower incomes from 2013 (less than \$15,000, 33.7 percent; \$15,000-24,999, 27.5) to 2017 (less than \$15,000, 25.6 percent; \$15,000-24,999, 21.2), but changed only slightly in the groups with incomes of \$25,000 and higher.

Almost fourteen (13.8) percent of adults needed to see a doctor in the past 12 months but could not because of the cost, including 29.8 percent of those with annual household incomes of less than \$15,000, 25.9 percent of those with incomes of \$15,000-\$24,999 and 22.1 percent of those with incomes of \$25,000-\$34,999.

Eighty-two (82.2) percent of adults last had a routine checkup within the past two years; 16.5 percent last had a checkup two or more years ago, and 1.3 percent had never had a checkup.

## **Health Risk Behaviors**

### *Current Cigarette Smoking and Quitting*

Twenty-one (20.8) percent of Missouri adults smoked cigarettes every day or some days, a slight decline from 22.1 percent in 2013. In 2017, a significantly greater percentage of adults with less than a high school education (40.5 percent) smoked cigarettes than adults with a high school education or GED (26.6 percent), some post high school education (17.9 percent) or a college degree (8.2 percent). Six (5.6) percent of adults used chewing tobacco, snuff, or snus every day or some days. More than one-half (52.0 percent) of current smokers stopped smoking for one day or longer in the past 12 months because they were trying to quit. Among adults who had stopped smoking, 15.6 percent last smoked a cigarette within the past 12 months, 21.2 percent one to five years ago, 10.2 percent five to ten years ago and 53.0 percent ten or more years ago.

### *Electronic Cigarette Use*

Twenty-five (24.5) percent of Missouri adults had ever used an electronic cigarette. More than five (5.2) percent used e-cigarettes every day or some days.

### *Smokeless Tobacco Use*

Smokeless tobacco was currently used every day or some days by 10.6 percent of Missouri adult males.

### *Smoke-free Laws*

Eighty (79.9) percent of adults supported local laws that make all indoor workplaces smoke-free, and 72.5 percent supported a change in Missouri law that would make all indoor workplaces smoke-free statewide.

### *Physical Inactivity*

Twenty-nine (29.2) percent of Missouri adults had not participated in leisure time physical activity or exercise in the past month, a slight increase from 28.3 percent in 2013. A significantly greater percentage of adults with less than a high school education (44.4 percent) and a high school education or GED (35.1 percent) were physically inactive compared to adults with some post-high-school education (28.3 percent) or a college degree (16.1 percent).

### *Heavy and Binge Alcohol Drinking*

Six (5.7) percent of Missouri adults were considered heavy drinkers as defined by males having more than two drinks per day and females having more than one drink per day. A significantly greater percentage of males (6.7 percent) than females (4.7 percent) engaged in heavy drinking. A significantly greater percentage of males (23.9 percent) than females (14.0 percent) engaged in binge drinking on at least one occasion during the past month. Binge drinking is defined as having five or more drinks on one occasion for males and four or more drinks for females.

## **Injuries**

### *Seatbelt Use*

Eighteen (17.9) percent of Missouri adults did not always wear a seat belt. Twenty-four (23.6) percent of males and 12.3 percent of females did not always wear a seat belt.

## **Chronic Diseases and Conditions**

Missouri adults had the percentage of chronic conditions or diseases in 2017 as follows.

- *Overweight* – 35.4 percent  
A significantly greater percentage of males (40.7 percent) than females (29.9 percent) were overweight.
- *Obesity* – 32.5 percent  
A significantly greater percentage of African-American adults (40.7 percent) were obese than White Non-Hispanic adults (32.0 percent).
- *Arthritis* – 27.8 percent  
A significantly greater percentage of adults with less than a high school education (38.8 percent) had arthritis than adults with a high school education or GED (30.0 percent), some post high school education (25.9 percent) or a college degree (22.6 percent).
- *Depressive Disorder* – 22.4 percent

A significantly greater percentage of females (29.9 percent) than males (14.5 percent) had been told by a health professional that they had a depressive disorder. A significantly greater percentage of adults with less than a high school education (31.3 percent) had a depressive disorder than adults with a high school education or GED (21.3 percent), some post high school education (23.8 percent), or a college degree (18.1 percent).

- *Diabetes* – 10.4 percent

A slightly greater percentage of African-American adults (13.3 percent) had been told by a health professional they had diabetes compared to white adults (10.2 percent). Among adults with diabetes, sixty four (63.6) percent had been told they had diabetes after the age of 45. Over half (57.3 percent) of adults had a test for high blood sugar or diabetes within the past 3 years. Nine (9.4) percent of adults had been told by a health professional they had pre-diabetes.

- *Current Asthma* – 9.4 percent

A significantly greater percentage of adult females (12.5 percent) than males (6.1 percent) currently had asthma.

- *Chronic Obstructive Pulmonary Disease* – 8.5 percent

A significantly greater percentage of adults with less than a high school education (20.9 percent) had been told by a health professional they had chronic obstructive pulmonary disease than adults with a high school education (9.8 percent), some post high school education (7.0 percent) or a college degree (3.5 percent).

- *Cancer (Other than skin)* – 8.0 percent

18.6 percent of adults age 65 and older had been diagnosed with a type of cancer other than skin cancer. Seven (6.8) percent of adults had been diagnosed with skin cancer, including 18.6 percent of adults age 65 and older.

- *Heart Attack* – 5.0 percent

A significantly greater percentage of males (6.0 percent) than females (4.0 percent) had been told by a health professional they had experienced a heart attack or a myocardial infarction.

- *Coronary Heart Disease* – 4.7 percent

A significantly greater percentage of males (5.7 percent) than females (3.9 percent) had been told by a health professional that they had coronary heart disease or angina.

- *Stroke* – 4.2 percent

A significantly greater percentage of adults ages 65 and older (8.7 percent) had been told by a health professional that they had experienced a stroke than adults less than 65 years of age (3.0 percent).

- *Kidney Disease* – 3.3 percent

About three percent of adults had been told by a health professional that they had kidney disease.

### *Childhood Asthma*

Adults with children under the age of 18 were asked to answer questions about a randomly selected child in the household. Responses were weighted to be representative of all children in Missouri under the age of 18. As a result, it was found that 12.6 percent of children under the age of 18 in Missouri had been told by a doctor or other health professional that they had asthma. Among those that had been told they had asthma, 72.8 percent still had the condition.

## **Chronic Disease Management**

### *Diabetes Management*

Among adults that had been told by a doctor or other health professional they had diabetes:

- 92.9 percent had a health professional test for A-one-C one or more times in the past 12 months; 75.4 percent had the test two or more times in the past 12 months
- 89.8 percent had seen a doctor or other health professional for their diabetes one or more times in the past 12 months; 75.5 percent had seen a doctor or other health professional two or more times in the past 12 months



- 77.8 percent had a health professional check their feet for sores or irritations one or more times in the past year
- 67.3 percent had a dilated eye exam within the past year
- 61.1 percent checked their blood glucose one or more times per day
- 54.8 percent had taken a course or class in how to manage their diabetes
- 31.8 percent were taking insulin
- 17.5 percent had been told diabetes had affected their eyes or that they had retinopathy

### *Hypertension Control*

Among adults that had been told by a doctor or other health professional their blood pressure was high – The percentage that were doing the following to lower or control their high blood pressure:

- 71.9 percent were changing their eating habits
- 70.2 percent were cutting down on salt
- 60.3 percent were exercising
- 27.7 percent were reducing alcohol use

The percentage that had a doctor or other health professional advise them to do the following to help lower or control their high blood pressure:

- 89.4 percent were advised to take medication
- 69.9 percent were advised to exercise
- 64.6 percent were advised to cut down on salt
- 60.2 percent were advised to change their eating habits
- 23.8 percent were advised to reduce alcohol use

76.9 percent were told on two or more different visits to a doctor that they had high blood pressure.

### *Blood Pressure Monitoring*

Among adults with hypertension, 58.5 percent measured their own blood pressure at home, and 76.0 percent of those measured by self regularly shared their blood pressure readings with their doctors.

## **Prevention and Screening**

### *Immunizations*

Forty-three (43.1) percent of adults age 18 and older had the flu vaccine within the past twelve months. Among adults age 65 and older, 65.4 percent had the flu vaccine within the past 12 months. Also among adults age 65 and older, 77.7 percent had ever had a pneumococcal vaccination. Among adults age 50 and older, 26.5 percent have ever had the shingles or Zoster vaccine: Its vaccination rate was 5.9 percent in the age group of 50 to 59 years, 24.2 percent in the group of 60-64 years, and 43.9 percent in the group of 65 years and older.

### *HIV Testing*

Thirty-five (34.8) percent of adults age 18 and older had ever been tested for HIV. A significantly greater percentage of African-American adults (61.9 percent) than white adults (30.4 percent) had been tested. About 48 percent (47.7) of Hispanic had ever been tested for HIV.



### *Lung Cancer Screening*

In the last 12 months, 12.9 percent had a CT or CAT scan for lung cancer among the adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years.

### **Oral Health and Family Planning**

#### *Oral Health and Tobacco*

Sixty-four (64.4) percent of Missouri adults visited a dentist within the past year, 11.6 percent had seen a dentist between one and two years ago, 8.9 percent had done so between two and five years ago and 15.2 percent had last seen a dentist five or more years ago. Almost one-third (32.9 percent) of adults with an annual household income of less than \$15,000 had not visited a dentist within the past five years. Among the visitors within the past year, 40.1 percent were asked if they smoked tobacco, and 48.2 percent of current smokers were advised to quit smoking; 29.3 percent were asked if they used smokeless tobacco or chew, and 35.0 percent of its current users were advised to quit using.

#### *Family Planning*

Forty-six (45.6) percent of women (49 years or younger, no hysterectomy, not pregnant) or their partners did something to keep them from getting pregnant when having sex at the last time. Among those who did, 37.5 percent chose surgical procedures, and 62.5 percent used other methods.